

ABSTRACT

A hot runner system for injecting plastics material from a plasticizer unit into an injection mold for molding very small plastic devices, includes a hot runner manifold having an inlet for receiving melted plastics material from the plasticizer unit and a heater for maintaining the manifold at an elevated temperature. A check valve mounted in the manifold allows one way flow of the plastic in the feed conduit. This valve preferably comprises a ball type valve. A metering apparatus includes a cylinder forming an elongate metering chamber and a ram movable therein. An inner end of the chamber opens into one side of the feed conduit downstream of the check valve and the longitudinal axis of the chamber is perpendicular to the longitudinal axis of the conduit where they meet. At least one injector is connected to a downstream end of the feed conduit and it is spaced from the metering apparatus.